

## T87 / Y87

### SINGLE ZONE THERMOSTAT RANGE

#### PRODUCT SPECIFICATION SHEET



#### DESCRIPTION & APPLICATION

T87/Y87 is a family of modern digital room thermostats available in both wired and RF models and capable of Connected operation via a Honeywell RFG100 internet gateway.

Output configurations include modulating (OpenTherm) and on/off.

Wired OpenTherm models are powered by the OpenTherm bus. The room units for all RF models are powered by 2 x AA alkaline batteries.

Applications include direct boiler control or as the room unit in a multi-zone control system, providing room temperature measurement and setpoint adjustment functions. Compatible zone controllers are Evohome and the HCE80 underfloor heating controller.

#### FEATURES

- Single zone thermostat, offering Connectivity as an upgrade.
- Connected models allow remote operation and scheduling via the Honeywell TCC app for smartphones or tablets.
- Modern, stylish design to fit any decor.
- Compatible for retrofit with previous generations of T87.
- Simple intuitive operation by rotating dial.
- Large backlit display.
- 0.5°C accuracy.
- Installer mode, allowing setting of maximum and minimum set temperatures and default off setpoint.
- A range of models to suit different installations or applications.
- Battery-operated models use 2xAA alkaline batteries. Minimum battery lifetime 2 years, with battery low warning indicator.
- Control forms are either Modulating (via OpenTherm) or TPI. See Specifications and Model Listings for more information.
- Suitable for wall mounting.
- Wireless models have 2-way RF communication on 868MHz band, offering a typical range of 30m in buildings.
- Wireless control of remote boiler using BDR91 relay box or R8810 OpenTherm bridge.
- Suitable for use as the room unit in systems containing Evohome or HCE80 underfloor heating controller.
- CE, WEEE and RoHS compliant.

## SPECIFICATIONS

ELECTRICAL	
Power Supply (room thermostat)	: <b>T87M / T87HC / T87C</b> – Opentherm 2 wire bus : <b>T87RF</b> – 2xAA (LR6) 1.5V alkaline batteries : <b>T87G</b> – lifetime power pack
Switch Type/Rating	: See table per model on next page
Wiring	: <b>T87M / T87HC / T87C</b> 2 x screw terminals, with access from back : <b>T87RF / Y87RF</b> packs – wiring is to RF transceiver
RF SPECIFICATION (T87RF, Y87RF, T87C, Y87C)	
Operation band	: ISM (868.0-868.6) MHz, 1% duty cycle
Communication range	: 30 m in a residential building.
Communication technology	: 2-way RF, using short, high rate transmissions to minimise air time and avoid collisions.
Blocking immunity	: Receiver class 2 (ETSI EN300 220-1)
ENVIRONMENTAL & STANDARDS	
Operating	: 0°C to 40°C
Shipping/storage	: -20°C to 55°C
Humidity	: Range 10% to 90% rh, non-condensing
Protection Class	: IP20 for T87 room thermostat (IEC144) : IP40 for BDR91, R8810, RFG100
Approvals & Regulatory Compliance	: CE mark; refer to DOCs for details : D1115 for T87M, T87HC : D1116 for T87C, Y87C : D1117 for T87RF, Y87RF, Y87RFC : D1118 for T87G
ErP Class	: <b>IV (2%)</b> for T87G, T87RF, Y87RF, Y87RFC : <b>V (3%)</b> for Y87RF2008 : <b>VI (4%)</b> for T87M, T87HC, T87C, Y87C
PHYSICAL PROPERTIES	
Enclosure	: Flame retardant plastic housings.
Dimensions	: T87 84mm $\Phi$ , 33mm height
Weight	: 133g (T87RF/T87G), 89g (T87 /T87HC /T87C) excluding packaging/literature.

## MODEL LISTINGS

Listing	Languages	Control Type	Switch Type	RF Control	Connectable *	Connected pack	Thermostat	Transceiver	Gateway
T87M2018	NL	Modulation	OpenTherm				T87M		
T87M2036	EN,ES,FR, NL,DE,IT, HU,CZ,PL, SK,RO,TR	Modulation	OpenTherm				T87M		
T87HC2011	NL	Modulation Heat/Cool	OpenTherm				T87HC		
T87C2055	NL	Modulation	OpenTherm		•		T87C		
Y87C2004	NL, BE	Modulation	OpenTherm			•	T87C		RFG100
T87RF2025	NL	TPI	uses BDR91	•	•		T87RF		
T87RF2033	EN	TPI	uses BDR91	•	•		T87RF		
T87RF2041	IT, FR, ES	TPI	uses BDR91	•	•		T87RF		
T87RF2059	DE	TPI	Uses BDR91	•	•		T87RF		
Y87RF2008	NL	Modulation	OpenTherm	•	•		T87RF	R8810	
Y87RF2012	NL	TPI	SPDT 5(3)A 24...230Vac	•	•		T87RF	BDR91	
Y87RF2024	EN	TPI	SPDT 5(3)A 24...230Vac	•	•		T87RF	BDR91	
Y87RF2058	IT, FR, ES	TPI	SPDT 5(3)A 24...230Vac	•	•		T87RF	BDR91	
Y87RFC2032	NL, BE	TPI	SPDT 5(3)A 24...230Vac	•		•	T87RF	BDR91	RFG100
Y87RFC2066	IT, FR, ES	TPI	SPDT 5(3)A 24...230Vac	•		•	T87RF	BDR91	RFG100
Y87RFC2074	PL, HU, CZ, SK, RO	TPI	SPDT 5(3)A 24...230Vac	•		•	T87RF	BDR91	RFG100
Y87RFC2090	TR	TPI	SPDT 5(3)A 24...230Vac	•		•	T87RF	BDR91	RFG100
Y87RFC2116	EN	TPI	SPDT 5(3)A 24...230Vac	•		•	T87RF	BDR91	RFG100
T87G2014-E	NL	TPI	SPST 1..250mA 3..24Vac 40Vdc				T87G		

\* Device can become Connected by binding to a Honeywell RFG100 Internet Gateway



*Institut*  
**Automatització, S.L.**  
c\ Gomis, 29-33, 08023 BARCELONA

Tel.: 93 454 20 06  
Fax: 93 323 70 59

iac@instauto.com  
www.instauto.com

www.  
**TODO-  
CONTROL**.com  
SOLUCIONES PARA AUTOMATIZACIÓN Y CLIMATIZACIÓN

**Honeywell**